

PATENT COOPERATION TREATY

PCT

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference GHS/P503618W0	FOR FURTHER ACTION see Notification of Transmittal of International Search Report (Form PCT/ISA/220) as well as, where applicable, item 5 below.	
International application No. PCT/GB 03/ 00939	International filing date (day/month/year) 06/03/2003	(Earliest) Priority Date (day/month/year) 06/03/2002
Applicant BACCHUS WINE CLOSURES LIMITED		

This International Search Report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This International Search Report consists of a total of 9 sheets.

☒ It is also accompanied by a copy of each prior art document cited in this report.

1. Basis of the report

- a. With regard to the **language**, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

☐ the international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).

- b. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international search was carried out on the basis of the sequence listing :

☐ contained in the international application in written form.

☐ filed together with the international application in computer readable form.

☐ furnished subsequently to this Authority in written form.

☐ furnished subsequently to this Authority in computer readable form.

☐ the statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.

☐ the statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished

2. ☐ **Certain claims were found unsearchable** (See Box I).

3. ☒ **Unity of invention is lacking** (see Box II).

4. With regard to the **title**,

☐ the text is approved as submitted by the applicant.

☒ the text has been established by this Authority to read as follows:

STOPPER

5. With regard to the **abstract**,

☐ the text is approved as submitted by the applicant.

☒ the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box III. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. The figure of the **drawings** to be published with the abstract is Figure No.

☒ as suggested by the applicant.

☐ because the applicant failed to suggest a figure.

☐ because this figure better characterizes the invention.

1
☐ None of the figures.

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Box III TEXT OF THE ABSTRACT (Continuation of item 5 of the first sheet)

A stopper (1), particularly for a wine bottle, comprising a barrier layer (3) comprising a hot melt polymetric adhesive and optionally at least one sub-layer having lower oxygen permeability than the hot melt adhesive.

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Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:
2. ☐ Claims Nos.:
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see additional sheet

1. ☒ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☒ No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. Claims: 1-40

Invention 1 - Claims 1-40: A stopper comprising a barrier layer which comprises a hot melt polymeric adhesive.

2. Claim : 41

Invention 2 - Claim 41: A method of applying a pre-polymer to a stopper comprising: forming a pre-polymer by combining an isocyanate solution with a polyol solution; applying the pre-polymer to a surface of the stopper; and allowing the pre-polymer to cure.

3. Claim : 42

Invention 3 - Claim 42: A method of applying a barrier layer to a stopper comprising: applying hot melt adhesive to one of a stopper and a partially formed barrier layer; allowing the hot melt adhesive to cool; and contacting the stopper and the barrier layer such that bonding occurs.

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A. CLASSIFICATION OF SUBJECT MATTER
 IPC 7 B65D39/00

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 B65D B65G B27K

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X A	<p>WO 00 64647 A (VINPAC INTERNAT PTY LTD ;MA ROSALIND (AU); WILKS TERRY (AU); BRITC) 2 November 2000 (2000-11-02)</p> <p>page 1, line 1 - line 5 page 3, line 5 - line 8 page 3, line 15 - line 17 page 4, last paragraph page 5, line 19 - line 20 page 9, paragraph 1 page 11, line 1 - line 9 page 14, last paragraph; claims 1-3,5,6</p> <p>---</p> <p>-/--</p>	<p>1,9-11, 22,23, 25-28, 30,32,40 14,17</p>

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

° Special categories of cited documents :

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier document but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

"&" document member of the same patent family

Date of the actual completion of the international search

5 August 2003

Date of mailing of the international search report

25.08.03

Name and mailing address of the ISA

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Janosch, J

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X ✓	WO 00 64649 A (VINPAC INTERNAT PTY LTD ;MA ROSALIND (AU); WILKS TERRY (AU); BRITC) 2 November 2000 (2000-11-02) page 1, line 1 - line 6 page 1, line 18 - line 20 page 7, line 9 - line 14 page 8, line 19 - line 21 page 13, paragraph 1; claims 1-3,8	1,9-11, 22,23, 25-28, 30,32,40
A	---	14,17
X ✓	US 5 527 580 A (AOKI YOSHIHIDE ET AL) 18 June 1996 (1996-06-18) column 3, line 13 - line 29 column 3, line 41 - line 44 column 5, line 6 - line 9; claims 1-5; figures 1-5	1,6,7, 11,14, 17,19,21 9,16,28
A	---	
X ✓	PT 95 130 A (SOBERANA CORTICEIRA SA) 28 February 1992 (1992-02-28) page 1, line 14 - line 30; claims 1-3	1,15, 26-28 9,14,17
A	---	
X ✓	FR 1 022 562 A (MAZZONI LUCIEN) 6 March 1953 (1953-03-06) page 2, line 3 - line 20 page 2, line 34 - line 37; claim 1; figure 3	1,11,14, 19,21, 26,27 9,17,28
A	---	
X ✓	EP 0 205 312 A (NITTO ELECTRIC IND CO ;DAIKYO GOMU SEIKO KK (JP)) 17 December 1986 (1986-12-17) page 1, line 2 - line 5 page 3, line 15 - line 23; claims 1,4,5; figures 3,4	1,6-8,21 9,37-39
A	---	
X ✓	DE 39 40 461 A (PFEFFERKORN & CO) 13 June 1991 (1991-06-13) cited in the application	1-5,11, 14-16, 18,19, 22,23, 26,27, 30,31, 33-36 9,24,28
A	column 2, line 43 - line 53 column 2, line 65 - column 3, line 1 column 3, line 56 - line 65; claims 1,5,6,12; figures 1-3 ---	

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X ✓✓	DE 42 25 092 A (KESSLER REINHARD) 4 February 1993 (1993-02-04) cited in the application	1-7,9, 11,14, 15, 18-20, 22,23, 25-27, 30-37,40 9,24,28
A	column 2, line 28 - line 44 column 2, line 61 - line 63 column 4, line 20 - line 28 column 4, line 46 - line 47; claims 1-4; figures 1,2,6-9	
X ✓✓	DE 19 42 494 A (DYNAMIT NOBEL AG) 4 March 1971 (1971-03-04)	1,19,21
A	page 2, line 6 - line 13 page 2, last paragraph page 5, last paragraph page 6, line 1 - line 9; claims 1-3,9; figure 3	9
P,X ✓✓	WO 03 004367 A (PROCEL PTY LTD ;MATHESON NORMA CATHERINE (AU)) 16 January 2003 (2003-01-16)	1,6-11, 14-16, 19,21
	page 12, line 9 - page 13, line 12 page 13, line 24 - line 26 page 19, line 12 - line 14; claims 2,5-10,12,14-22,26,27,35; figures 1-9	
P,X ✓✓	EP 1 270 703 A (HENKEL KGAA) 2 January 2003 (2003-01-02)	1,15,18, 19, 26-28,41 9,17
A	column 1, line 8 - line 17 column 1, line 42 - line 46 column 3, line 6 - line 34 column 3, line 47 - line 54; claims 3,4	
X ✓✓	DE 889 221 C (BRODHAGE KORKEN UND KORKWARENF) 7 September 1953 (1953-09-07)	41
	page 2, line 4 - line 40; claim 1	
X ✓✓	EP 0 927 613 A (NERI F & C S N C) 7 July 1999 (1999-07-07)	42
	column 3, line 22 - line 30; claim 1	
Y ✓✓	PATENT ABSTRACTS OF JAPAN vol. 017, no. 316 (M-1430), 16 June 1993 (1993-06-16)	41
	-& JP 05 031831 A (NAGAYANAGI KOGYO KK), 9 February 1993 (1993-02-09)	
A	abstract; figures 1,2,5,6	42
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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y ✓	✓ US 5 018 337 A (CARTER DAVID G ET AL) 28 May 1991 (1991-05-28)	41
A	column 2, line 22 - line 24 column 2, line 45 - line 49; claim 4 -----	42

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Information on patent family members

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WO 0064647	A	02-11-2000	WO 0064647 A1	02-11-2000
			AU 3949200 A	10-11-2000
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			WO 9106276 A1	16-05-1991
			KR 138514 B1	27-04-1998
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			EP 1270703 A2	02-01-2003
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			EP 0927613 A2	07-07-1999
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